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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,141	08/09/2000	Mitsunori Nodono	Q60353	5577

7590 12/17/2003

Sughrue Mion Zinn MacPeak & Seas  
2100 Pennsylvania Avenue NW  
Washington, DC 20037

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/635,141

Applicant(s)

NODONO ET AL.

Examiner

Elizabeth M Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8, 10-18, 28-31 and 48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8, 10-18, 28-31 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 6-8, 12, 28-31 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al, U.S. Patent NO. 5,180,751 in view of DE 2,532,406.

Parks et al discloses a method of making a multi-layer polypropylene foam as set forth in paragraph 4 of paper no. 2. Parks does not teach that the folded material maybe cut, folded and bonded to each other. DE 2,532,406 teaches that sheets of foam may be folded and bonded to each other in order to form laminated foams. Therefore, it would have been obvious to have folded the foams of Parks rather than cutting the layers and then bonding them. One of ordinary skill in the art would have been motivated to fold and bond rather than cut because DE 2,532,406 teaches that this is an alternative and known method of making a bonded foam material and because this would avoid the step of cutting the foam, thereby reducing costs by simplifying the process.

3. Claims 10-11, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al in view of DE 2,532,406 as applied to claims 6-8, 12, 28-31 and 48 above, and further in view of Kelch, U.S. Patent No. 5,000,992. Park et al teaches a multilayered foam laminate which may comprise gas barrier layers. Park et al does not teach laminating the foam laminate to additional preformed layers. Kelch teaches that multi-layered foam materials may be laminated to additional materials including foils, films, and combinations thereof. See col. 4, lines 44-61. These materials would inherently act as a gas barrier layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have laminated the material of Park et al to additional layers as taught by Kelch. One of ordinary skill in the art

would have been motivated to bond the Park et al structure to additional layers as taught by Kelch in order to further enhance the properties of the multi-layered material.

Any rejections not maintained above are withdrawn.

Applicant's arguments filed 10/3/03 have been fully considered but they are not persuasive. With regard to a folding step, it is not clear how the folds are formed, i.e., where is the fold located, which side is folded towards itself, how many folds are formed, etc, and thus the method is not clear

With regard to claim 6, Applicant's arguments are moot in view of the new rejection. With regard to claim 7, Applicant argues that DE '406 does not teach folding and relies on the corresponding GB '369 to show this. However, GB '406 states that it is known to form foam laminates by folding the laminates and bonding them. See col. 1, lines 32-36. Applicant argues that present invention is not intended to cover the forming of a butt joint in a tube as a laminating step and that GB '406 does not use the word laminating. However, laminating is defined as making by bonding several layers. Therefore, the step of folding and bonding disclosed in GB '406 is a laminating step. Also, the instant claims are not specific as to the type of folding process, and therefore, the folding and bonding steps of GB '406 encompass the claims. Finally, Applicant argues that one of ordinary skill in the art would not have been motivated to combine the teachings of Park which are drawn to a method of making a foam sheet with the teachings of DE '406 which relate to bonding an already formed foam sheet. However,

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Park also relates to methods by which foam sheets may have different layers bonded thereto, such as by extruding additional layers, etc. DE '406 teaches a method of bonding which is simple and does not require additional steps such as cutting. Both references are drawn to polypropylene foams and both references teach methods of forming and shaping polypropylene foam sheets. Therefore, it is the examiner's position that one of ordinary skill in the art would have been motivated by the teaching of DE '406 to have shaped the sheets of Park in order to arrive at a foam sheet which was laminated to itself without the necessity of additional cutting and shaping steps.

With regard to claim 10, Park teaches the claimed incising step. See col. 8, lines 16-19. With regard to claims 11, 15-18, Applicant argues that neither Park nor Kelch teach laminating two multiplayer polyolefin sheets and a gas barrier resin sheet. However, Kelch teaches laminating multiplayer foams to additional layers such as barrier layers. See col. 4, lines 44-61. Therefore, it would have been obvious to have formed the laminates structures as taught by Kelch.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for all official faxes is (703) 872-9306. The fax number for unofficial faxes is (703) 305-5436.

A handwritten signature in cursive script, appearing to read "Elizabeth M. Cole".

Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c